



[11] Patent Number: 5,954,671
[45] Date of Patent: Sep. 21, 1999

- 5,807,276 9/1998 Russin 610/567

- ## OTHER PUBLICATIONS

- Spinetech, Inc.: "Bone Harvester Kit" Promotional Literature.**

- BioMedical Enterprises, Inc.:** "Bone and Marrow Collection System" Promotional Literature.

Primary Examiner—Michael Buiz

- Assistant Examiner*—Julian W. Woo

- Attorney, Agent, or Firm—John P. McGonagle**

- [57]
- ABSTRACT**

- An apparatus and method for harvesting bone using a manual, cylindrical, multi-directional coring device with a guided delivery system that can be inserted through a percutaneous or closed approach to extract precisely measured amounts of bone or bone marrow. A series of guide wires, obturators, dilators and cannulas are used as the exposure and delivery instrumentation for a cutting tool. The cutting tool has a tip with six cutting edges for cutting in all directions.

- 15 Claims, 6 Drawing Sheets**

4,782,833	11/1988	Einhorn .	
5,324,300	6/1994	Elias .	
5,488,958	2/1996	Topel et al.	600/567
5,556,399	9/1996	Huebner .	
5,577,517	11/1996	Bonutti .	

